

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A method ~~to wirelessly communicate data over a plurality of cellular channels~~, comprising:

requesting an allocation of preferably adjacent cellular frequency channels from a mobile station to a base station;

allocating available frequency channels in response to the request from the mobile station; and

bonding the available frequency channels to communicate data; and

bonding a short-range radio channel with ~~to~~ the cellular frequency channels; and

communicating the data from the mobile station over the bonded cellular and short-range radio channels ~~using short-range radio protocol and cellular protocol~~.

Claim 2 (cancel)

Claim 3 (currently amended): The method of claim ~~[[2]]~~ 1, wherein the short-range radio channel is Bluetooth or WLAN (802.11x).

Claim 4 (cancel)

Claim 5 (currently amended): The method of claim 1, wherein the cellular frequency channels comprise an uplink band around 890-915 MHz and a downlink band around 935-960 MHz.

Claim 6 (cancel)

Claim 7 (original): The method of claim 5, wherein each band is divided into 124 pairs of frequency duplex channels with 200 kHz carrier spacing using Frequency Division Multiple Access (FDMA).

Claim 8 (currently amended): The method of claim ~~[[5]]~~ 7, further comprising:

splitting the 200 kHz radio channel into a plurality of time slots;

bonding the time slots; and

transmitting and receiving data in the bonded time slots.

Claim 9 (currently amended): The method of claim ~~[[5]]~~ 7, further comprising splitting the 200 kHz radio channel using time division multiple access (TDMA).

Claim 10 (original): The method of claim 5, further comprising transmitting cellular packet data conforming to one of the following protocols: cellular digital packet data (CDPD) (for AMPS, IS-95, and IS-136), General Packet Radio Service (GPRS) and EDGE (Enhanced Data for Global Evolution).

Claim 11 (previously presented): A mobile terminal ~~reconfigurable processor core~~, comprising:

a plurality of processing units;

a long-range transceiver ~~unit~~ coupled to the processing units, the long-range transceiver ~~to unit communicating~~ communicate over a plurality of cellular frequency channels;

a short-range transceiver coupled to the processing units to communicate over a short-range radio channel; and

means for bonding a plurality of the cellular frequency channels and the short-range radio channel to communicate data from the mobile terminal ~~using cellular protocol and short range protocol.~~

Claim 12 (currently amended): The ~~processor core~~ mobile terminal of claim 11, wherein the plurality of processing units comprise a reconfigurable processor core ~~that~~ includes one or more digital signal processors (DSPs).

Claim 13 (currently amended): The ~~processor core~~ mobile terminal of claim ~~[[11]]~~ 12, wherein the reconfigurable processor core includes one or more reduced instruction set computer (RISC) processors.

Claim 14 (currently amended): The ~~processor core~~ mobile terminal of claim 11, further comprising a router coupled to the ~~one or more~~ plurality of processing units.

Claims 15-20 (cancel)

Claim 21 (new): The method of claim 1, further comprising bonding the short-range radio channel with the cellular frequency channels dynamically based on a current traffic load.

Claim 22 (new): The method of claim 1, further comprising bonding the short-range radio channel with the cellular frequency channels dynamically based on a priority of service.

Claim 23 (new): The method of claim 1, further comprising deallocating the available frequency channels after communicating the data.

Claim 24 (new): The method of claim 1, further comprising communicating the data and voice information simultaneously over the bonded cellular and short-range radio channels.

Claim 25 (new): An apparatus comprising:

a processor;

a first transceiver coupled to the processor to communicate over cellular frequency channels;

a second transceiver coupled to the processor to communicate over a short-range radio channel; and

a circuit to bond a plurality of the cellular frequency channels and the short-range radio channel to communicate data from the apparatus.

Claim 26 (new): The apparatus of claim 25, wherein the processor comprises a reconfigurable processor core that includes one or more digital signal processors (DSPs).

Claim 27 (new): The apparatus of claim 26, wherein the reconfigurable processor core includes one or more reduced instruction set computer (RISC) processors.

Claim 28 (new): The apparatus of claim 26, further comprising a router coupled to the reconfigurable processor core.

Claim 29 (new): The apparatus of claim 28, wherein the router to bond the plurality of the cellular frequency channels and the short-range wireless channels.